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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,871	03/25/2004	Fansan Zhu	2565/115	6622

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KENYON & KENYON LLP  
ONE BROADWAY  
NEW YORK, NY 10004

EXAMINER

ROY, BAISAKHI

ART UNIT	PAPER NUMBER
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3737

MAIL DATE	DELIVERY MODE
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07/12/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/808,871

Applicant(s)

ZHU ET AL.

Examiner

Baisakhi Roy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-22 filed 4/23/07 have been fully considered but they are not persuasive. With respect to the structural elements in claim 1, as claimed, Brown clearly teaches an electrode arrangement including multiple sets of electrodes placed in different planes but Brown does not teach the rotation movement of a set of electrodes. Kaiser teaches an electrode arrangement where the electrodes are rotated about the axis X-X in a plane E, which is perpendicular to the drawing plane. Kaiser also teaches obtaining resistance images of additional planes (col. 2 lines 29-39). With respect to the number of electrode arrangements, Kaiser also teaches the use of pairs of electrodes 28, 29, 30 that are positioned around the body part containing shell 27. Kaiser teaches movement of the electrodes to various planes. Therefore it would have been obvious to use the electrode movement teaching in Kaiser to modify the teaching by Brown for the purpose of effectively determining current density distribution in various planes and imaging different regions of interest corresponding to the current density distribution (col. 2 lines 34-39).
2. Applicant's arguments with respect to claims 23-26 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-26 rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (6015389) in view of Kaiser (6363275). Brown discloses a system for performing electrical impedance tomography comprising multiple sets of electrodes in different planes (col. 3 lines 63-67, col. 4 lines 1-20). Brown teaches a current source configured to inject current between the electrodes with switches to connect the electrodes and a processor to control the switches and a voltage measurement device to measure voltage between the electrodes (col. 2 lines 26-33, col. 3 lines 26-40). The reference further teaches positioning the electrodes in various arrangements with the patient body part to be placed between the lower and upper portions (col. 2 lines 66-67, col. 3 lines 1-6) and includes an output of the current density distribution (col. 3 lines 38-43). Brown also teaches said device to measure voltage synchronized with the breathing period (col. 2 lines 40-44, col. 4 lines 41-50).

Brown however does not teach or suggest rotating the electrodes around an axis. In the same field of endeavor Kaiser discloses a device for treating tumors including an electrode arrangement where the electrodes are rotatable about an axis X-X arranged in the drawing plane (col. 2 lines 1-5) and where the electrodes are rotatable in any desired steps in a plane E which is at right angles to the drawing plane (col. 2 lines 15-17). Kaiser teaches a housing or carrier 19 configured to support the electrodes and configured to receive a body part within the housing or carrier. Kaiser also teaches enclosing the organism part 10 by a rigid and insulating shell 27 to maintain a constant shape (col. 3 lines 29-48). Kaiser teaches the use of treatment method to treat various

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tissues and therefore it would be obvious to treat a body part such as an arm, leg, or calf. It would have therefore been obvious to one of ordinary skill in the art to use the teaching by Kaiser to modify the teaching by Brown for the purpose of generating a current density distribution in other planes as well for improved resolution.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baisakhi Roy whose telephone number is 571-272-7139. The examiner can normally be reached on M-F (7:30 a.m. - 4p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BR

BR

  
BRIAN L. CASLER  
SUPERVISORY PATENT EXAMINER  
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